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APPLICATION NO. FILING DATE		ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/712,904	11	1/13/2003	David J. Baker	25090A	9434	
22889	7590	01/19/2005		EXAMINER		
OWENS C			HALPERN, MARK			
2790 COLU GRANVILI				ART UNIT	PAPER NUMBER	
,				1731		
				DATE MAILED: 01/19/2005	DATE MAILED: 01/19/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application	on No.	Applicant(s)				
		10/712,90)4	BAKER ET AL.				
(Office Action Summary	Examiner		Art Unit				
			k Halpern	1731				
TI Period for Re	ne MAILING DATE of this communicati eply	on appears on the	e cover sheet with th	e correspondence add	ress			
THE MAI - Extensions after SIX (I - If the peric - If NO peric - Failure to I Any reply I	TENED STATUTORY PERIOD FOR LING DATE OF THIS COMMUNICAT of time may be available under the provisions of 37 as) MONTHS from the mailing date of this communicated for reply specified above is less than thirty (30) day of or reply is specified above, the maximum statutor reply within the set or extended period for reply will, beceived by the Office later than three months after the term adjustment. See 37 CFR 1.704(b).	FION. CFR 1.136(a). In no evention. ys, a reply within the state y period will apply and w by statute, cause the app	ent, however, may a reply b utory minimum of thirty (30) ill expire SIX (6) MONTHS f lication to become ABANDO	e timely filed days will be considered timely, rom the mailing date of this con DNED (35 U.S.C. § 133).	nmunication.			
Status								
1)⊠ Re:	sponsive to communication(s) filed or	n <u>05 January</u> 200	<u>5</u> .					
	action is FINAL . 2b) This action is non-final.							
-	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition (of Claims							
4a) 5)	specification is objected to by the Exdrawing(s) filed on is/are: a)[blicant may not request that any objection blacement drawing sheet(s) including the	and/or election recaminer. accepted or b) to the drawing(s) to	equirement. objected to by the held in abeyance. ed if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFF	• •			
	oath or declaration is objected to by er 35 U.S.C. § 119	the Examiner. No	ne me attached On	ice Action of form FTC	J-132.			
12) Ack a) A 1. 2. 2	nowledgment is made of a claim for full b) Some * c) None of: Certified copies of the priority doc	uments have bee uments have bee e priority docume Bureau (PCT Rul	n received. n received in Applic ents have been rece e 17.2(a)).	cation No eived in this National S	Stage			
2) Notice of (3) Information	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-9 n Disclosure Statement(s) (PTO-1449 or PTO s)/Mail Date <u>11/13/03</u> .		4) Interview Summ Paper No(s)/Ma 5) Notice of Inform 6) Other:		152)			

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DETAILED ACTION

Election/Restrictions

1) Applicant's election with traverse of invention I, drawn on claims 1-18, in the reply filed on 1/5/2005, is acknowledged. The traversal is on the ground(s) that the subject matter of all claims is related and the search of the entire application could be made without serious burden. This is not found persuasive; the applicant failed to provide an appropriate showing or evidence to rebut the showing of serious burden set forth in the restriction requirement as is required by MPEP 803 – merely arguing that the search of the entire application could be made without serious burden does not meet the requirements of MPEP 803.

The requirement is still deemed proper and is therefore made FINAL.

Claims 19-26, are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

2) The restriction of species of shown in each of Figures 2, 4, 6, has been withdrawn.

Specification

3) Reference to related application is not recited on page 1 of the Specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4) Claims 1-7, 10, 15, 17-18, are rejected under 35 U.S.C. 102(b) as being anticipated by Pflugl (5,925,165).

Claims 1-5, 7, 10: Pflugl discloses glass melting furnace 1 (col.1, lines 30-35) that is constructed of an upstream end and an downstream end, charge opening 7, multiple burners 9, 10, located and mounted in the roof of the furnace, and exhaust ducts 25, 38 located downstream of all of said burners (col. 3, line 18 to col. 4, line 46 and Figures 1, 2).

Claims 6, 17-18: exhaust ducts 25 and 38 read on exhaust stacks leading to a separate exhaust gas cleaning device or can be connected to a shared exhaust gas cleaning device (col. 4, lines 42-46).

Claim 15: Pflugl discloses glass melting furnace 1 (col.1, lines 30-35) that is constructed of an upstream end and a downstream end, charge opening 7 located at the upstream end, discharge 50 located at the downstream end, multiple burners 9, 10, located and mounted in the roof of the furnace, and exhaust ducts 25, 38 located downstream of all of said burners (col. 3, line 18 to col. 4, line 46 and Figures 1, 2).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pflugl. Pflugl discloses glass melting furnace 1 (col.1, lines 30-35) that is constructed of an upstream end and a downstream end, charge opening 7 located at the upstream end, discharge 50 located at the downstream end, multiple burners 9, 10, located and mounted in the roof of the furnace, and exhaust ducts 25, 38 located downstream of all of said burners (col. 3, line 18 to col. 4, line 46 and Figures 1, 2). Pflugl is silent on the distance of the exhaust from the charge end wall, however, it would have been obvious, to one skilled in the art at the time the invention was made, that at least exhaust 38 be 70% the distance from the charge end wall to the discharge end wall since exhaust 38 is located near the discharge end wall.
- Claims 8, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pflugl in view of Bly (4,481,024). Pflugl is applied as above for claims 1, 15, Pflugl does not disclose that the exhaust is located at a discharge wall of the furnace. Bly discloses a glass melting furnace where exhausts 38, 39, are located at a discharge wall of the furnace as shown in Figure 1. It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Pflugl and Bly,

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because such a combination would improve heat recovery in the design of Pflugl as disclosed by Bly (Abstract).

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- Over Pflugl in view of Hoke (6,519,973). Pflugl is applied as above for claims 1, 10, 12, Pflugl does not disclose that the exhaust is located at a sidewall of the furnace. Hoke discloses a glass melting furnace where exhausts 145, 147, are located at sidewalls of the furnace as shown in Figure 7. It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Pflugl and Hoke, because such a combination would improve glass quality of Pflugl as disclosed by Hoke (Abstract).
- 8) Claims 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pflugl in view of Hoke and further in view of Bly. Pflugl in view of Hoke is applied as above for claim 11, Pflugl in view of Hoke is silent on the distance of the exhaust from the charge end wall, however, it would have been obvious, to one skilled in the art at the time the invention was made, that at least exhaust 38 of Pflugl be 80% the distance from the charge end wall to the discharge end wall since exhaust 38 is located near the discharge end wall.
- 9) Claims 1-6, 8, are rejected under 35 U.S.C. 102(b) as being anticipated by Boyle (3,552,949).

Claims 1-6: Boyle discloses glass melting furnace 1 that is constructed of an upstream end and a downstream end, charge opening 5, multiple burners 11 located

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and mounted in the roof of the furnace, and exhaust stack 3 located downstream of all of said burners (col. 1, lines 10-17, col. 2, lines 8-44, and Figure 1).

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Claim 8: the stack is located at a discharge end wall of the furnace as shown in Figure 1.

Conclusion

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Halpern